

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A hydraulic coupling system, comprising
a pump;
a clutch assembly including an actuator and a multi-disk clutch pack coupled to the actuator, the pump pressuring a fluid in the actuator to engage the clutch pack and pumping the fluid through the clutch pack to cool the clutch pack;
a pressure control communication with a reservoir, the actuator and the clutch pack valve for maintaining the fluid pumped to the actuator at a higher pressure than the pressure of the fluid pumped through the clutch pack to cool the clutch; and
a controller which transmits pulse-width modulated control signals to the pump to control the operation of the pump and pulse-width modulated control signals to the valve to control the operation of the valve.